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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,686	03/03/2004	Max Braun	037110.53267US	2292

23911 7590 09/28/2006

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EXAMINER
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PRICE, ELVIS O

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/790,686

Applicant(s)

BRAUN ET AL.

Examiner

Elvis O. Price

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-8 and 10-18 is/are rejected.
- 7) ☒ Claim(s) 2,3 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/3/04; 8/12/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

Claims 1-18 are pending in the application

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-8, 10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gumprecht {US Pat. 5,608,127}.

Gumprecht discloses the presently claimed method for preparing a compound corresponding to the present formula (I) comprising contacting a compound corresponding to the present formulas II or III with antimony pentafluoride (see Examples 2 and 3).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 11, 12, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gumprecht {US Pat. 5,608,127}.

Gumprecht teaches a general method for preparing a hydrochlorofluoropropane, having the general formula  $C_3HCl_{7-x}F_x$ , wherein  $x=3$  to  $6$  and  $H$  is at a terminal carbon atom, comprising contacting a compound having general formula  $C_3HCl_{7-x}F_x$ , wherein  $x=2$  to  $5$  and  $H$  is at a terminal carbon atom, with high-fluoride-content antimony pentahalides characterized by the formula  $SbF_{5-y}Cl_y$ , wherein  $y=0$  to  $1$  (see Summary of the Invention; Col. 8, lines 5-19). The difference between the presently claimed invention and what is taught by the Gumprecht reference is that the reference does not teach an aluminum or aluminum coated apparatus nor does the reference exemplify carrying out the reaction in the presence of both hydrofluoric acid and an antimony compound. However, Gumprecht generally teaches that the reaction apparatus should be constructed of materials resistant to the action of all and any chemical species involved in the process of preparing the hydrochlorofluoropropane compounds and that although hydrofluoric acid is not needed in the reaction it can still however be used in the reaction (see Cols. 7, lines 25-37 and Col. 8, lines 5-19).

It would have been obvious to one having ordinary skill in the art, in view of the teachings in the Gumprecht reference, to arrive at the presently claimed invention for preparing a hydrochlorofluoroalkane corresponding to the present formula I because Gumprecht teaches a similar method for preparing the said compounds according to the present formula I, comprising contacting a compound having general formula  $C_3HCl_7$ .

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$x\text{F}_x$ , wherein  $x=2$  to  $5$  and  $\text{H}$  is at a terminal carbon atom, with high-fluoride-content antimony pentahalides characterized by the formula  $\text{SbF}_5\text{-yCl}_y$ , wherein  $y=0$  to  $1$ .

One having ordinary skill in the art would have been motivated (depending on cost and availability of materials, convenience, efficiency, etc.), to carry out the Gumprecht method in any suitable reaction vessel (including an aluminum or aluminum coated apparatus) and/or to use hydrofluoric acid in conjunction with the antimony pentafluoride to, at the very least, arrive at other art recognizable methods for preparing the said hydrochlorofluoropropane compounds. Thus, the instantly claimed invention would have been obvious to one having ordinary skill in the art.

***Allowable Subject Matter***

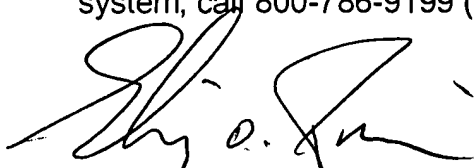
Claims 2, 3 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvis O. Price whose telephone number is 571 272-0644. The examiner can normally be reached on 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Elvis O. Price', with a stylized, cursive script.

Elvis O. Price